

August 22, 2003
Case No.: IT-010006 (7790/226)
Serial No.: 10/070,867
Filed: March 12, 2002
Page 3

CLAIM AMENDMENTS

Claims 1-13 are currently pending in the application.

Please amend claims 1-13 as shown below.

The following listing of claims 1-13 will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of coding a data stream (S1,S2), the method comprising:
channel coding (11) respective partitions of a given part of the data stream with different error protection rates to obtain a coded data stream (WS1, WS2); and including (14, 20) a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream (WS1, WS2).
2. (Currently Amended) The method as claimed in claim 1, wherein the length information (lf) field includes the lengths of the partitions before channel coding.
3. (Currently Amended) The method as claimed in claim 1, wherein the length information (lf) field includes the lengths of the partitions after channel coding.
4. (Currently Amended) The method as claimed in claim 1, wherein the length information (lf) field is included in a field just after a resync marker (H5) of the given part of the data stream (S1, S2).
5. (Previously Amended) The method as claimed in claim 1, wherein the data stream (S1, S2) includes at least one marker (H1... H5) out of a predetermined set of at least two mutually different markers (H1... H5), the marker indicating a start of a given part of the data stream, the method further comprising:

August 22, 2003
Case No.: IT 010006 (7790/226)
Serial No.: 10/070,867
Filed: March 12, 2002
Page 4

representing (13) the at least one marker (H1... HS) with a higher robustness word (WH1... WH5) having a higher robustness to channel errors than the at least one marker; and

outputting (14) the data stream with the at least one marker represented with the higher-robustness word (WH1... WH5).

6. (Currently Amended) A method of decoding a coded data stream (WS1, WS2), in which coded data stream respective partitions of a given part of the coded data stream have been channel encoded with different error protection rates, the coded data stream further includes a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream, the method comprising:

B

reading (40) the length information (lf) field; and
channel decoding (31) the coded data stream (WS1, WS2) using the length information (lf) field to obtain a decoded data stream (S1, S2).

7. (Currently Amended) The method as claimed in claim 6, further comprising:
deleting (40, 31, 34) the length information (lf) field from the coded data stream.

August 22, 2003
Case No.: IT 010006 (7790/226)
Serial No.: 10/070,867
Filed: March 12, 2002
Page 5

8. (Currently Amended) An encoder for coding a data stream (S1, S2), the encoder comprising:

a channel encoder (11) for channel coding respective partitions of a given part of the data stream with different error protection rates to obtain a coded data stream (WS1, WS2); and

means (14, 20) for including a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream (WS1, WS2).

9. (Currently Amended) A decoder for decoding a coded data stream (WS1, WS2), in which coded data stream respective partitions of a given part of the coded data stream have been channel encoded with different error protection rates, the coded data stream further including a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream, the decoder comprising:

means (40) for reading the length information field; and

means (31) for channel decoding the coded data stream (WS1, WS2) using the length information (lf) field to obtain a decoded data stream (S1, S2).

10. (Currently Amended) A transmitter for transmitting a coded data stream (WS1, WS2), the transmitter comprising:

an encoder for coding a data stream (S1, S2), the encoder including

a channel encoder (11) for channel coding respective partitions of a given part of the data stream with different error protection rates to obtain a coded data stream (WS1, WS2), and

means (14, 20) for including a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream (WS1, WS2); and

means (14) for transmitting the coded data stream (WS1, WS2).

August 22, 2003
Case No.: IT 010006 (7790/226)
Serial No.: 10/070,867
Filed: March 12, 2002
Page 6

11. (Currently Amended) A receiver for receiving a coded data stream (WS1, WS2),
the receiver comprising:

means (30) for receiving the coded data stream; and
a decoder for decoding a coded data stream (WS1, WS2), in which coded data
stream respective partitions of a given part of the coded data stream have been channel
encoded with different error protection rates, the coded data stream further including a
single length field information (lf) concerning respective lengths of the respective
partitions in the coded data stream, the decoder including

means (40) for reading the length information field, and
means (31) for channel decoding the coded data stream (WS1, WS2) using
the length information (lf) field to obtain a decoded data stream (S1, S2).

12. (Currently Amended) A coded data stream (WS1, WS2) in which respective
partitions of a given part of the coded data stream have been channel encoded with
different error protection rates, the coded data stream further comprising a single length
information (lf) field concerning respective lengths of the respective partitions in the
coded data stream.

13. (Currently Amended) A storage medium (15) on which a coded data stream
(WS1, WS2) has been stored, the coded data stream having respective partitions of a
given part of the coded data stream have been channel encoded with different error
protection rates, the coded data stream further comprising a single length information (lf)
field concerning respective lengths of the respective partitions in the coded data stream.

January 5, 2004
Case No.: IT 010006 (7790/226)
Serial No.: 10/070,867
Filed: March 12, 2002
Page 2 of 10

CLAIM LISTING

Claims 1-13 are currently pending in the application.

The following listing of claims 1-13 will replace all prior versions, and listings, of claims in the application:

1. A method of coding a data stream (S1,S2), the method comprising:
channel coding (11) respective partitions of a given part of the data stream with different error protection rates to obtain a coded data stream (WS1, WS2); and
including (14, 20) a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream (WS1, WS2).
2. The method as claimed in claim 1, wherein the length information (lf) field includes the lengths of the partitions before channel coding.
3. The method as claimed in claim 1, wherein the length information (lf) field includes the lengths of the partitions after channel coding.
4. The method as claimed in claim 1, wherein the length information (lf) field is included after a resync marker (H5) of the given part of the data stream (S1, S2).
5. The method as claimed in claim 1, wherein the data stream (S1, S2) includes at least one marker (H1... H5) out of a predetermined set of at least two mutually different markers (H1... H5), the marker indicating a start of a given part of the data stream, the method further comprising:
representing (13) the at least one marker (H1... H5) with a higher robustness word (WH1... WH5) having a higher robustness to channel errors than the at least one marker; and

January 5, 2004
Case No.: IT 010006 (7790/226)
Serial No.: 10/070,867
Filed: March 12, 2002
Page 3 of 10

outputting (14) the data stream with at least one marker represented with the higher-robustness word (WH1... WH5).

6. A method of decoding a coded data stream (WS1, WS2), in which coded data stream respective partitions of a given part of the coded data stream have been channel encoded with different error protection rates, the coded data stream further includes a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream, the method comprising:

reading (40) the length information (lf) field; and
channel decoding (31) the coded data stream (WS1, WS2) using the length information (lf) field to obtain a decoded data stream (S1, S2).

7. The method as claimed in claim 6, further comprising:
deleting (40, 31, 34) the length information (lf) field from the coded data stream.

8. An encoder for coding a data stream (S1, S2), the encoder comprising:
a channel encoder (11) for channel coding respective partitions of a given part of the data stream with different error protection rates to obtain a coded data stream (WS1, WS2); and

means (14, 20) for including a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream (WS1, WS2).

9. A decoder for decoding a coded data stream (WS1, WS2), in which coded data stream respective partitions of a given part of the coded data stream have been channel encoded with different error protection rates, the coded data stream further including a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream, the decoder comprising:

means (40) for reading the length information field; and

January 5, 2004
Case No.: IT 010006 (7790/226)
Serial No.: 10/070,867
Filed: March 12, 2002
Page 4 of 10

means (31) for channel decoding the coded data stream (WS1, WS2) using the length information (lf) field to obtain a decoded data stream (S1, S2).

10. A transmitter for transmitting a coded data stream (WS1, WS2), the transmitter comprising:

an encoder for coding a data stream (S1, S2), the encoder including

a channel encoder (11) for channel coding respective partitions of a given part of the data stream with different error protection rates to obtain a coded data stream (WS1, WS2), and

means (14, 20) for including a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream (WS1, WS2); and

means (14) for transmitting the coded data stream (WS1, WS2).

11. A receiver for receiving a coded data stream (WS1, WS2), the receiver comprising:

means (30) for receiving the coded data stream; and

a decoder for decoding a coded data stream (WS1, WS2), in which coded data stream respective partitions of a given part of the coded data stream have been channel encoded with different error protection rates, the coded data stream further including a single length field information (lf) concerning respective lengths of the respective partitions in the coded data stream, the decoder including

means (40) for reading the length information field, and

means (31) for channel decoding the coded data stream (WS1, WS2) using the length information (lf) field to obtain a decoded data stream (S1, S2).

12. A coded data stream (WS1, WS2) in which respective partitions of a given part of the coded data stream have been channel encoded with different error protection rates, the

January 5, 2004
Case No.: IT 010006 (7790/226)
Serial No.: 10/070,867
Filed: March 12, 2002
Page 5 of 10

coded data stream further comprising a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream.

13. A storage medium (15) on which a coded data stream (WS1, WS2) has been stored, the coded data stream having respective partitions of a given part of the coded data stream have been channel encoded with different error protection rates, the coded data stream further comprising a single length information (lf) field concerning respective lengths of the respective partitions in the coded data stream.